

L 40981-65 ENT(1)/EWG(v)/EEC(t) Po-4/Pe-5/Pae-2 GW

ACCESSION NR: AR5009008

S/0269/65/000/002/0014/0014

SOURCE: Ref. zh. Astronomiya. Otd. vyp., Abs. 2.51.137

AUTHOR: Shakirov, K. S.

TITLE: Determination of the constants of physical libration and coordinates of the crater Moesting A in relation to the center of the lunar mass

CITED SOURCE: Izv. Astron. Engel'gardtovsk. observ. Kazansk. un-ta, no. 34, 1963, 39-59

TOPIC TAGS: moon, lunar physical libration, lunar crater, Moesting A, lunar mass, meridian observation, lunar figure, lunar limb

TRANSLATION: The classical method for determining the parameters of lunar physical libration requires measurements of the distances from the crater Moesting A to points on the limb. Therefore an unreliable knowledge of the general figure of the moon leads to large systematic errors. The author has proposed a method for determination of these parameters by a tie-in between the crater and stars by means of meridian observations: the results obtained in this way are free of errors due to an inexact knowledge of the profile of the lunar limb. The author

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gives the results of analysis of 89 meridian observations of the crater Moesting A at Greenwich from 1952 to 1954. The article includes a detailed description of the method of determining the sought-for unknowns, among which the most important is the parameter f of the figure of the moon. This parameter was obtained by the Sh. T. Khabibullin method, involving the use of a harmonic with an annual period in the expression for physical libration in longitude. The value 0.71 was obtained for f ; the results of the analysis also made it possible to estimate the position of the lunar center of mass relative to the center of the figure (by 0".4 toward the north, by 0".3 toward the east and by 3.3 km closer to the observer). Bibliography of 16 items. Kh. Potter.

SUB CODE: AA

ENCL: 00

llc
Card 2/2

SHAKIROV, R.S.

Observations of lunar occultations of stars at the Engel'gardt
Astronomical Observatory in Kazan. Izv. Inst. teor. astron. 9 no. 8:
579 '64. (MIRA 17:12)

1. Astronomicheskaya observatoriya imeni Engel'gardta, Kazan.

L 47314-66 ENT(1) GW

ACC NR: AR6028395

SOURCE CODE: UR/0269/66/000/005/0014/0014

AUTHOR: Shakirov, K. S.

9
B

TITLE: Determination of the constants of physical libration of the moon from plotting the crater to the stars with a correction allowance for the orbit inclination

SOURCE: Ref. zh. Astronomiya, Abs. 5.51.113

REF SOURCE: Uch. zap. Kazansk. un-t, v. 125, no. 7, 1965, 89-92

TOPIC TAGS: Lunar libration, physical libration, Yarkovkin model, libration effect, libration constant

ABSTRACT: A study has been made of the effect of disk asymmetry (first Yarkovkin model) on the accuracy of determining the constants of revolution of the moon. When determining the constants of physical libration through the method of plotting the crater to the stars (see RZH Astr. 1963, 7.51.96), corrections were introduced in the free terms of the arbitrary equations for δ

Cord 1/2

UDC: 523.33

ACC. NO. 140028395

... term of $\Delta\delta' = 0.01$, which correspond to the discrete values of correcting the inclination of the lunar orbit to the ecliptic, caused by the libration effect in the lunar radius: $\Delta\delta' = -0.6, -0.5, \dots, +0.3$. According to observations, the minimum value of the sum of the squares of the remaining deviations, after allowance for the correction $\Delta\delta'$, corresponds to $\Delta\delta' = -0.12$. The results of the solution obtained by this value ($\Delta\delta'$) differ little from the constants of revolution, which correspond to $\Delta\delta' = 0$. The constant f is completely independent of the correction allowances $\Delta\delta'$. This is explained by the fact that the wave period λ_{sing} is not commensurate with the anomalistic month. The difference between the obtained value $\Delta\delta' = -0.12$ from other evaluations and an analysis of the results of processing the heliometric series with and without allowance for the asymmetry of the lunar disk suggested the presence of general asymmetry in the apparent lunar disk. The accuracy of determining the constants of physical libration in the case of the second Yarkovkin model is higher than the first one; however, it remains lower than the accuracy of the solution for a spherical model. It is assumed that the elliptical model is the best approximation to the actual shape of the Moon. It is concluded that an explanation of the libration effect in the radius should not be sought in the asymmetry of the apparent lunar disk. Orig. art. has: 13 reference items. [Translation of abstract] [FM]

SUB CODE: 03/

Card 2/2

SHAROV, N. N.

SHAROV, N. N.

"The principles and selection of a system of operating stratified cotton gins." Published by the Acad Sci Uzbek SSR. Acad Sci Uzbek SSR. Power Engineering Inst. Tashkent, 1951. (Dissertation for the Degree of Candidate in Technical Sciences).

Kulshreshtha, S. S.

1951, 1952. Moscow

SHAKIROV, K.SH.

Evaluation and selection of the method of drying raw cotton.
Izv. Ak. Uz. SSR. Ser. tekhn. nauk no. 2:53-57 '57. (MLRA 11:7)
(Cotton--Drying)

FAZYLOV, Kh.F., akademik; SHAKIROV, K.Sh.

Selecting the characteristics of layer-type cotton dryers.
Izv. AN Uz. SSR. Ser. tekhnauk no.4:47-57 '57. (MIRA 11:7)

1. AN UzSSR (for Fazylov)
(Cotton--Drying)

SHAKIROV, K.Sh.; YESIPOV, I.I.

Raw cotton temperature in the layer-drying process. Izv. AN
Uz. SSR. Ser. tekhn. nauk no.4:49-53 '59. (MIRA 13:1)

1. Institut energetiki i avtomatiki AN UzSSR.
(Cotton--Drying)

VINOXUROV, M.A.; MIROMOV, N.A.; SHAKIROV, K.Sh..

Influence of different forest types on the composition of soil
humus. Nauch. dokl. vys. shkoly; biol. nauki no.1:184-187 '60.
(MIRA 13:2)

1.Rekomendovana kafedroy pochvovedeniya Kazanskogo gosudarstvennogo
universiteta im. V.I. Ul'yanova-Lenina.
(Forest influences) (Humus)

SHAKIROV, K.Sh.

Equilibrium moisture content of raw cotton. Izv. AN Uz.
SSR. Ser. tekhn. nauk. no. 3:15-20 '60. (MIRA 13:7)

1. Institut energetiki i avtomatiki AN UzSSR.
(Cotton)

SHAKIROV, K.S.

Determination of the constants of physical libration and the coordinates of the crater Mösting A relative to the center of the moon's mass. Izv. AOE no.34:39-46 '63.

(MIRA 18:4)

SHAKIROV, K.Sh.

New vortex reverse burner for kilns in the building and ceramics
Industry. Gaz. delo no.10:32-34 '64. (MIRA 18:1)

1. Institut ispol'zovaniya topliva Gosudarstvennogo komiteta
neftepererabatyvayushchey i neftekhimicheskoy promyshlennosti.

L 06153-07 EWT(1) GW
ACC NR: AR6025333

SOURCE CODE: UR/0269/66/000/004/0008/0008

AUTHOR: Shakirov, K. S.

TITLE: Simultaneous determination of the constants of physical libration and of the longitude corrections of the Moon

SOURCE: Ref. zh. Astronomiya, Abs. 4.51.78

REF SOURCE: Sb. Itog. nauchn. konferentsiya Kazansk. un-ta za 1963 g. kts.: para-
magnitn. rezonansa, spektroskopii i fiz. polimerov, radiofiz., astron., kon. Kazan',
1964, 100

TOPIC TAGS: astronomy, moon, moon astrometrics, moon libration constant, moon lon-
gitude correction, *CELESTIAL BODY MOTION*

ABSTRACT: Computation results of the rotational constants and longitude corrections of the Moon are given, based on the Sh. T. Khabibulin method, applied to the results of Greenwich meridional observations of the Mesting A crater relative to stars, during 1950-1954. The longitude correction pertains to the old system of lunar ephemeris, published in astronomical yearbooks until 1959. The magnitude of the physical libration parameter obtained by the author, $f = .66 \pm .09$, is somewhat smaller than the generally accepted one. [Translation of abstract].

SUB CODE: 03

UDC: 523.33

Card 1/1 *ML*

L 06152-67 EWT(1) GW

SOURCE CODE: UR/0269/66/000/004/0008/0008

ACC NR: AR6025332

AUTHOR: Shakirov, K. S.

TITLE: Mutual disposition of the centers of mass and shape of the Moon

SOURCE: Ref. zh. Astronomiya, Abs. 4.51.77

REF SOURCE: Tr. 16-y Astrometr. konferentsii SSSR, 1963, M.-L., Nauka, 1965, 113-114

TOPIC TAGS: astronomy, moon, moon astrometrics, moon mass center, moon shape center, ASTROMETRY

ABSTRACT: Given are the results of lunar mass center determinations relative to the lunar shape center, from an evaluation of 89 Greenwich meridian observations in 1952-1954. Corrections of the rectangular coordinates of the Mesting crater A have been obtained, relative to the accepted ones, related to the projection of the mass center in the system of "Improved Lunar Ephemeris", $\Delta\xi = +1.8'' \pm .8''$; $\Delta\eta = -.3'' \pm .1''$; $\Delta\zeta = -.4'' \pm .1''$. From the foregoing, it is concluded that the lunar mass center is shifted .4" Northward, .3" Eastward and 3.3 km toward the observer, relative to the center of the accepted shape of the Moon (for a detailed review of this work, see Ref. zh. Astr., 1965, 2.51.137, Ref.). [Translation of abstract].

SUB CODE: 03

UDC: 523.33

Card 1/1 mLE

SHAKIROV, Mansur Akmelovich, inzh.

Nonuniformity of a magnetic field in the air gap of an asynchronous machine. Izv. vys. ucheb. zav.; elektromekh. 6 no.10:1151-1156 '63. (MIRA 17:1)

1. Kafedra elektricheskikh mashin Leningradskogo politekhnicheskogo instituta.

L 36491-65 EPA(s)-2/EWT(1)

ACCESSION NR: AT5004643

S/2563/64/000/241/0106/0113

AUTHOR: Shakirov, M. A.

9
8
6+1

TITLE: Low-speed synchronous micromotor with a harmonic rotor

SOURCE: Leningrad. Politekhicheskiy institut. Trudy, no. 241, 1964.
Elektromashinostroyeniye (Electrical machinery manufacture), 106-113

TOPIC TAGS: micromotor, harmonic rotor motor

ABSTRACT: The development of a new slow-speed synchronous micromotor with an active rotor responding to supply-frequency harmonics is reported. The design follows the "taimer" invented by British engineers H. S. Lewis and F. McGuirk a few years ago. Although the rotor carries 1 or 2 windings, its number of poles can reach 100 (table 2) with a corresponding reduction of motor rpm. Four models were built and tested with these stator-winding numbers of slots per pole per phase: 6/11 and 3/5 (two-phase), 4/7 and 2/5 (three-phase). Three of

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ACCESSION NR: AT5004643

them have these rpms: 428.6, 300, and 272.7. It is found that: (1) The synchronous torque is proportional to the excitation current and stator voltage; (2) Variation of the inductive reactance of the stator winding depending on the rotor position is only 10-15%; (3) Only the principal rotor flux need be considered; (4) The motor magnetic system is not saturated; iron loss constitutes only 8% of the total loss; (5) The tested models could be started only by a double 50-cps supply voltage; suggestions for improving the starting conditions are offered. Orig. art. has: 6 figures, 10 formulas, and 2 tables.

ASSOCIATION: Leningradskiy politekhnicheskii institut im. M. I. Kalinina
(Leningrad Polytechnic Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: EE

NO REF SOV: 004

OTHER: 001

Card 2/2

L 23212-66 EWT(1)
ACC NR: AP6013586

SOURCE CODE: UR/0144/65/000/002/0132/0139

AUTHOR: Shakirov, Mansur Akmelovich (Assistant)

ORG: Department of Theoretical Principles of Electrotechnics, Leningrad Polytechnic Institute (Kafedra teoreticheskikh osnov elektrotekhniki Leningradskogo politekhnicheskogo instituta)

TITLE: Angular characteristics and circular diagrams of synchronous micromotors

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Elektromekhanika, no. 2, 1965, 132-139

TOPIC TAGS: electric motor, magnetic circuit, miniature electric equipment

ABSTRACT: Due to constructive peculiarities and their small size, the parameters of micromotors differ considerably from the parameters of larger synchronous motors. This article analyses the angular characteristics of synchronous micromotors with active rotors (rotor field by PM or dc winding) and presents analyses of the characteristics under various operating conditions. Since most of the magnetic circuits in micromotors are not saturated, the circular diagrams presented are of value not only in theory, but can also be used for practical design calculation purposes. Although the characteristics of a normal synchronous micromotor are analysed, the same methods of analysis and calculation can be used for micromotors of the most varied sort. Orig. art. has: 6 figures and 9 formulas. [JPRS]

SUB CODE: 09 / SUBM DATE: 01Feb64 / ORIG REF: 004

UDC: 621.313.32

Card 1/1 *UL2*

SHAKIROV, M.K.

Organize well-equipped central repair and maintenance
shops. Mashinostroitel' no.6:3 Je '60.
(MIRA 13:8)

(Machine tools--Maintenance and repair)

GOLUB, F.M.; ARIPOV, U.A.; BRITUN, A.I.; SHAKIROV, M.Sh.; SATTAROV, R.K.

Regeneration of injured tissues and the possibility of its course being affected during the action of X rays on the body. Experimental data. Med.zhur. Uzb. no.11:16-21 N '60. (MIRA 14:5)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. F.M.Golub) i kafedry rentgenologii i meditsinskoy radiologii (zav. - dotsent G.S.Kuznetsov) Samarkandskogo gosudarstvennogo meditsinskogo instituta imeni I.P.Pavlova.
(X RAYS--PHYSIOLOGICAL EFFECT) (WOUNDS AND INJURIES)

SHAKIROV, M. SH., CAND MED SCI, "REGENERATION OF AN IN-
JURED NERVE IN RADIATION SICKNESS. (EXPERIMENTAL AND MORPHO-
LOGICAL ~~INVESTIGATION~~ *study*). " TASHKENT, 1961. (MIN OF HEALTH UZSSR.
TASHKENT STATE MED INST). (KL-DV, 11-61, 230).

-296-

SHAKIROV, M.Sh., dotsent

Cancer of the kidneys in children. Med. zhur. Uzb. no.2:71-72
F '60. (MIA 15:2)

1. Iz kliniki fakul'tetskoy khirurgii (zav. - prof. F.M.Golub)
Samarkandskogo gosudarstvennogo meditsinskogo instituta imeni
I.P.Pavlova. (KIDNEYS__CANCER) (CHILDREN__DISEASES)

DOKUCHAYEVA, N.F., kand. med. nauk; SHAKIROV, M.Sh., kand. med. nauk

Data of X-ray investigations following neurotomy of irradiated animals. Nauch. trudy SamMI 22:49-57 '63. (MIRA 17:9)

1. Iz kafedry fakul'tetskoy khirurgii i kafedry rentgenologii i meditsinskoy radiologii Samar'kandskogo meditsinskogo instituta.

KORTUNOV, A.K.; KORSHUNOV, Ye.S.; KUZNETSOV, P.L.; BARABASH, B.B.;
FRONTOV, A.I.; SHAKIROV, K.Z.; ALI-ZADE, M.A.; KHODZHAYEV,
A.K.; ALEKSANDROV, A.V., red.

[Gas industry in the U.S.A.] Gazovaia promyshlennost' SShA.
Moskva, Nedra, 1964. 339 p. (MIRA 18:9)

SHAKIROV; NOAK

Work practices of a progressive mine of the Karagandaugol'
Combine. Ugol' 37 no.9:17-19 S '62. (MIRA 15:9)

1. Shakhta No.31 Karagandinskogo ugol'nogo kombinata.
(Karaganda Basin--Coal mines and mining)

S/137/61/000/007/027/072
A060/A101

AUTHORS: Radyukevich, L. V.; Shakirov, N. M.

TITLE: Utilization experience of a five-stand mill

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1961, 8, abstract 7D53
("Tr. Konferentsii: Tekhn. progress v tekhnol. prokatn. proiz-va".
Sverdlovsk, Metallurgizdat, 1960, 582-589)

TEXT: The following problems are considered: 1) adjustment of stands, 2) distribution of reductions among the stands, 3) choice of speeds and tensions, 4) tension schedule, 5) cooling and lubrication on stands and their effect upon the geometrical shape of the strip and upon the output. As an effective method of decreasing the thickness nonuniformity of the metal, it is proposed to introduce voltage compensation in the circuit of the motor-generator, distributed in the following manner (in %): stand no. 1 - 0, stand no. 2 - 10, stand no. 3 - 50, stands no. 4 and no. 5 - 75. The introduction of compensation reduces the amount of unconditioned metal by 50 ps.

V. Pospekhov.

[Abstraster's note: Complete translation]

Card 1/1

ANTONOV, Sergey Pavlovich; BOYARSHNIKOV, Mikhail Ivanovich; KUFKIN,
Mikhail Ionovich; PIMENOV, Aleksandr Fedorovich; RADYUKEVICH,
Leonid Vladimirovich; SHAKIROV, Nur Mazitovich;

[Cold sheet-steel rolling] Kholodnaia prokatka zhesti. Moskva, /
Metallurgiiia, 1965. 266 p. (MIRA 18:3)

SHAKIROV, O.
AUTHOR: Alperovich, L.I. and Shakirov, O.

51-5-19/26

TITLE: The Effect of Viscosity on the Luminescence Yield of Dyes with Non-rigid Structure. (O vliyanií vyazkosti na vykhod lyumínestsentsii krasiteley s nezhestkoy strukturoy)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.2, No.5, pp. 666 - 669 (USSR).

ABSTRACT: Luminescence of dyes with non-rigid structure was studied by several workers (Refs. 1-3). It was found that some dyes, which do not fluoresce in any liquid solvent, do fluoresce in solid solutions. P.P. Feofilov [Ref. 3] has put forward a hypothesis that absence of fluorescence in low-viscosity media is due to internal rotations of separate parts of the excited molecule. This rotation changes the energy of the electron-excitation into heat. In solid solutions, fluorescence is produced due to damping of the internal rotations of the excited molecule by the solvent. This paper studies the effect of viscosity of true and colloidal solutions on the luminescence yield which is analogous to the effect of viscosity on the polarisation of luminescent solutions studied by Vavilov and Levshin [Ref. 7]. The dyes studied were those which produce strong luminescence in solid solutions in the red part of the spectrum. The various dyes possessed different degrees of

Card 1/3

The Effect of Viscosity on the Luminescence Yield of Dyes with Non-rigid Structure. 51-5-19/26

rigidity of the structural skeleton. The spectra were excited with 546 mμ wavelength of mercury. The luminescence brightness, which is proportional to the yield, was measured visually, using a red filter. The intrinsic luminescence of the solvent was allowed for. Viscosity was varied by means of adding glucose to glycerin. The results are shown in the figure on p. 667, which gives the dependence of yield on viscosity for: I bromphenol blue, II bromcresol purple, III neutral red, IV safranine, V triphenylmethane dyes. The figure shows that at large viscosities, the yield increases with viscosity, even for safranine and neutral red, which both possess very rigid structures. The effect of viscosity of colloidal solutions on the luminescence yield of dyes was studied by using colloidal solutions of gelatine in water. The viscosities of such gels are much larger than viscosities of glycerin-glucose mixtures. In spite of that very high viscosity, the following dyes: fuchsin, methyl violet, bromphenol blue and bromcresol purple had zero yield in aqueous solutions of gelatines. This is explained by assuming that in such gels, the dye is not adsorbed on gelatine, but is dissolved in the liquid phase of the colloid. When the gelatine films containing these dyes

Card 2/3

The Effect of Viscosity on the Luminescence Yield of Dyes with Non-^{51-5-19/26}rigid Structure.

were dried, strong fluorescence was observed. This is probably due to the attachment of the dye molecules to gelatine in drying of the colloid.

There are 1 figure, 1 table and 11 references, of which 8 are Slavic.

ASSOCIATION: Tadzhik State University. (Tadzhikskiy Gosudarstvennyy Universitet)

SUBMITTED: November 1, 1956.

AVAILABLE: Library of Congress
Card 3/3

SHAKIROV, O.; PONOMAREV, V.

Outstanding achievements. Sov.shakht. 10 no.7:7-9 J1 '61.

(MIRA 14:8)

1. Glavnyy inzh. shakhty No.31 kombinata Karagandaugol'
(for Shakirov). 2. Nachal'nik otдела ugol'noy promyshlennosti
TSentral'nogo byuro tekhnicheskoy informatsii Karagandinskogo
sovnarkhoza (for Ponomarev).

(Karaganda Basin--Coal mines and mining--Labor productivity)

RETSEPTOR, Ya. (g.Moskva); SHAKIROV, O.; NOAK, A.; SEREBRYANIKOV, G.,
ekonomist; KHAIT, M.; FILIPPENKO, A.; SULEYMANOV, A. (Dagestan-
skaya ASSR); GRIGOR'YEV, A.; DZHURINSKIY, N. (g.Kishinev);
MALYUKHI, L. (g.Klin); POLISHCHUK, I. (g.Pervoural'sk,
Sverdlovskoy obl.); GRIZODUB, Yu. (G.Frunze); CHIGAREV, A.

Letters to the editors. Sots. trud 6 no. 1:136-141 Ja '61.

(MIRA 14:1)

1. Glavnyy inzh.shakhty No. 31 tresta Kirovugol', g.Karaganda
(for Shakirov). 2. Nachal'nik planovogo otdela shakhty No. 31
tresta Kirovugol', g. Karaganda (for Noak). 3. Glavnyy bukhgalter
stroitel'nogo upravleniya "Tyazhmashstroy", g.Kramatorsk, Sta-
linskoy obl. (for Khait). 4. Nachal'nik otdela truda i
zarabotnoy platy vol'skogo zavoda "Metallist" (for Filippenko).
5. Nachal'nik otdela truda i zarabotnoy platy leningradskogo
zavoda "Kinap" (for Grigor'yev). 6. Pavinskiy l'nozavod
Kostromskoy oblasti (for Chigorev).

(Wage payment systems) (Industrial management)

L 4132-66

ACCESSION NR: AR5015195

UR/0275/65/000/006/V009/V010

534.286 - 8

SOURCE: Ref. zh. Elektronika i yeye primeneniye. Svodnyy tom, Abs. 6V58

AUTHOR: Shakirov, O.⁵⁵; Belinskiy, B. A.⁵⁵

TITLE: Low-power pulsed ultrasonic outfit with a maximum-type attenuator

CITED SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 18, M., 1963, 45-56

TOPIC TAGS: ultrasonics

TRANSLATION: Ways to improve the attenuators in pulsed ultrasonic outfits⁵⁵ are considered. Attenuators made from active resistors and connected at the receiver input, before the frequency converter, in series with a step-type attenuator, have two disadvantages: (1) difficult matching of the receiver quartz with the input and (2) frequency dependence of the attenuation; these disadvantages can be eliminated if the attenuator is connected in such a way that it serves as a load of the cathode follower, the latter being placed between the frequency converter and the IF

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ACCESSION NR: AR5015195

amplifier. In this case, the converter will not cause nonlinear distortion at low input voltages. Such attenuators have an error of 0.3—0.5 db. There is also another principle of measurement of the ultrasonic-wave attenuation. A pulse of the same frequency as that of the sounding pulse is applied to the input of the receiver of a standard-signal generator via a small capacitance (2—5 pf); this pulse should be amplitude-calibrated and time-delayed. By making the pulse heights equal, the attenuation may be read from the scale of the attenuator of the standard-signal generator. The accuracy of measurement has been enhanced by a multiple-echo-pulse method. Another method of enhancing the accuracy of measurement of the ultrasonic absorption is based on a higher accuracy of measurement of the sounding signal. A 4—100-Mc outfit is described whose attenuation can be measured with an error of 0.05 db. In this outfit, a method of variable acoustic path (1—40 mm) is used with an acoustic pulse delay and pulse comparison techniques.

SUB CODE: GP

ENCL: 00

Card 2/2

SHAKIROV, O.S.; POLIGALOV, V.T.; ZHISLIN, I.M.

Work practices in the Mine No.31 of the Karagandaugol' Combine.
Ugol' 36 no.2:51-56 / '61. (MIA 14:2)
(Karaganda Basin--Coal mines and mining)

SHAKIROV, R.; NURIDDINOV, R.N.; YUNUSOV, S.Yu.

Alkaloids of *Petilium Eduardi* (A.Rgl)Vved. Uzb.khim.zhur. 9
no.1:38-42 '65. (MIRA 18:6)

1. Institut khimii rastitel'nykh veshchestv AN UzSSR.

CHEN, S.; MURCHISON, R.N.; YINUSOV, S.Yu.

Alleloids of the bulbs of *Petilium Eduardi*. Chin. priod. seed.
no. 6122 1965. (MIRA 19.1)

1. Institut Khimii rastitel'nykh veshchestv AN UzSSR. Submitted July 2, 1966.

BOBORYKIN, Ye.P., red.; SARYCHEV, I.I., red.; FRADKIN, S.D., red.;
SHAKIROV, R.A., red.; LISOGOR, A.A., red.; VENTSKEVICH,
L.A., red.

[Technological information and propaganda at construction
projects in Russia] Tekhnicheskaya informatsiya i propaganda
na stroikakh Rossii; sbornik statei. Moskva, TSentr. biuro
tekhn. informatsii, 1962. 106 p. (MIRA 16:7)

1. Russia (1917- R.S.F.S.R.) Gosudarstvennyy komitet po
delam stroitel'stva.
(Construction industry--Technological innovations)

SHUKROV, R.A., inzh.

Defects in the work of elevator constructors. Prom. stroi. 42
no. 7:26-27 '65. (MIRA 18:8)

CHAYKINOV, R.Ye.; GILIMOV, A.G.

Experience of the oil Well Administration of the Ishimbay
Petroleum Trust in the recovery of casing from wells and
trenches. Neftprom. dolo no.6:19-21 '65.

(MIRA 38:70)

1. Neftpromyslovoye upravleniye "Ishimbayneft".

SEAKIROV, Salikhzyan; FURITS, N.Ya., red.; MIRZOYEVA, V.K., red.

[EVP-1 electronic computing attachment to the T-5MV
tabulator] Elektronnaia vychislitel'naia pristavka
EVP-1 k tabulatoru T-5MV. Moskva, Statistika, 1965.
77 p. (MIRA 19:1)

SHAKIROV, T. A.

SHAKIROV, T. A., Cand Med Sci -- (diss) "~~an~~ Experiment to Find-
~~the Basis of Microclimatic Norms in Operational Blocks~~ ^{in Establishing} ^{Clear} and
Rendering Harmless the Air in Them." Kazan', 1957. 10 pp. Kazan'
State Med Inst), 200 copies. (KL, 7-58, 113)

- 57 -

SHAKIROV, T.A., aspirant

Bacteriological pollution of the air in the area of operating
sections and its purification by ventilation. Kaz.-med.zhur.
40 no.2:59-62 Mr-Apr '59. (MIRA 12:11)

1. Iz kafedry obshchey gigiyeny (zav. - prof.V.V.Miloslavskiy)
Kazanskogo meditsinskogo instituta.
(HOSPITALS--HYGIENE) (AIR--BACTERIOLOGY)

YUNUSOV, S.Yu., akademik; SHAKIROV, T.T.; PLEKHANOVA, N.V.

Alkaloids from *Convolvulus subhirsutus* Rgl. and Schmae of the
family Convolvulaceae. Dok. AN Uz.SSR no.10:17-20 '58.
(MIRA 11:12)

1. Institut khimii rastitel'nykh veshchestv AN UzSSR.2. Chlen-
korrespondent AN SSSR i akademik AN UzSSR (for Yunusov).
(Alkaloids) (Bindweed)

ACC NR: AP7011362

(N)

SOURCE CODE: UR/0393/66/000/004/0293/0294

AUTHOR: Aripov, Kh. N.; Shakirov, T. T.; Yuldashev, P. Kh.

ORG: Institute of Chemistry of Vegetable Matter, Academy of Sciences USSR
(Institut khimii rastitel'nykh reshchestv AN UzSSR)

TITLE: Isolation of vincanine

SOURCE: Khimiya prirodnikh soyedineniy, no. 4, 1966, 293-294

TOPIC TAGS: plant chemistry, acetic acid

SUB CODE: 07,06

ABSTRACT: Vincanine was extracted by a countercurrent method from the roots of *Vinca erecta* Rgl. et Schmalh with a 1 percent solution of acetic acid. The extract was desorbed with 1.5 percent ammoniacal solution in 85 percent ethyl alcohol. The condensed alcoholic solution was acidified with concentrated hydrochloric acid and evaporated to remove alcohol, while the acid solution was alkalized with excess 30 percent caustic soda, and extracted three times with chloroform. The latter was distilled under vacuum to dryness and, after treatment with acetone, vincanine was isolated and converted into vincanine hydrochloride. [JPRS: 40,351]

Card 1/1

YUNUSOV, S.Yu., akademik; PLEKHANOVA, N.V.; SHAKIROV, T.7

Investigation of several species of Bremurus. Dokl. AN Uz. SSR
no. 11:25-27 ' 58. (MIRA 11:12)

1. Chlen-korrespondent AN SSSR, AN UzSSR (for Yunusov). 2. Institut
khimii rastitel'nykh veshchestv AN UzSSR.
(Lilies) (Alkaloids)

SHAKIROV, T.; SIDYAKIN, G.P.; YUNUSOV, S.Yu., akademik

Alkaloids from seeds of *Haplophyllum perforatum*. Dokl. AN Uz. SSR
no. 6:28-30 '59. (MIRA 12:9)

1. Institut khimii rastitel'nykh veshchestv AN UzSSR. 2. AN
UzSSR (for Yunusov).
(Alkaloids)

NABIYEV, M.N., akademik; SHAKIROV, Yu.I.

Precipitation of calcium and magnesium nitrates from nitric acid
extractions of Kara-Tau--Phosphorites. Izv. AN Uz. SSR. Ser. khim.
nauk no.4:19-23 '57. (MIRA 11:9)

1. AN UzSSR (for Nabiyeu).

(Kara-Tau--Phosphorites) (Calcium nitrate) (Magnesium nitrate)

L 52793-65 EWT(m)/EPF(c)/EWP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5016188

UR/0079/64/034/012/3950/3952 22

AUTHOR: Imayev, M. G.; Shakirova, A. M.; Shirmanova, Ye. P.; Kas'yanova, Ye. K. 21 6

TITLE: Organophosphorus compounds with an active methylene group. I --synthesis of some esters of beta-ketophosphinic acids 1

SOURCE: Zhurnal obshchey khimii, v. 34, no. 12, 1964, 3950-3952

TOPIC TAGS: phosphinic acid, ester, organic synthetic process

Abstract: The reaction of trialkyl phosphite with omega-bromoacetophenone was used to synthesize seven dialkylphosphoneacetophenones, previously undescribed in the literature: dimethyl-, di-n-propyl-, di-n-butyl-, di-n-amyl-, di-n-hexyl-, di-n-heptyl-, and di-n-octylphosphoneacetophenone. All the dialkylphosphoneacetophenones obtained reacted vigorously with sodium, liberating hydrogen, and gave characteristic color reactions with ferric chloride in alcohol solution. The products were viscous yellow liquids with a sharp odor, readily soluble in organic solvents. Data are cited on the physical properties of the new products: percent yields, boiling points, specific gravities, refractive indices, molecular refractions. Orig. art. has 2 tables.

Card 1/2

L 52793-65

ACCESSION NR: AP5016188

ASSOCIATION: Bashkirskiy gosudarstvennyy universitet (Bashkir State University)

SUBMITTED: 28Sep63

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 011

OTHER: 001

JPRS

BA B
Card 2/2

IM.157, M.G. [deceased]: CHAIRMAN, A.M.

Reaction of triphenyl phosphite with ω -bromo- α -chloro- β -methyl- γ -butyrolactone.
Zhurav, Khim. 35 no.12:2223-2225, 1962.

(MFI 1962)

I. Nauchno-issledovatel'skiy institut sinteticheskikh khimicheskikh
Substituted November 30, 1962.

L 25603-66

EWT(m)/EWP(j) RM

ACC NR: AP6016705

SOURCE CODE: UR/0079/65/035/012/2223/2225

AUTHOR: Imayev, M. G. (Deceased); Shakirova, A. M.

ORG: Scientific Research Institute of Synthetic Fats (Nauchno-issledovatel'skiy institut sinteticheskikh zhirov)

TITLE: Reaction of triphenylphosphite with omega-bromoacetophenone

SOURCE: Zhurnal obshchey khimii, v. 35, no. 12, 1965, 2223-2225

TOPIC TAGS: organic phosphorus compound, phosphinic acid, brominated organic compound, phosphate

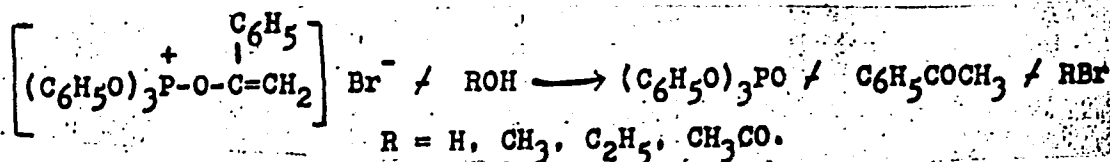
ABSTRACT: The authors previously showed that at 160-220° trialkylphosphites, $(RO)_3P$, where $R = C_1-C_8$, undergo the Arbuzov rearrangement with omega-bromoacetophenone to form the corresponding alkyl halides and esters of ketophosphinic acids. The purpose of this article was to describe the study of the interaction of triphenylphosphite with omega-bromoacetophenone. It is shown that triphenylphosphite reacts with omega-bromoacetophenone in anhydrous benzene, toluene, or xylene or without a solvent at 120-130° to form an addition product which is thermally unstable and very reactive. It reacts readily with compounds having an active hydrogen, with the evolution of heat.

Card 1/2

UDC: 661.718.1

L 25603-66

ACC NR: AP6016705



At higher temperatures (120-140° and higher), triphenylphosphate, phenylacetylene, and hydrogen bromide are formed, which are the products of the thermal decomposition of the adduct. A mechanism for the latter reaction is proposed. [JPRS]

SUB CODE: 07 / SUBM DATE: 30Nov64 / ORIG REF: 006 / OTH REF: 007

Card 2/2

L 64128-55 EPT(e)/EWP(j)/ENT(m) - RM
ACCESSION NR: AP5019431

UR/0020/65/163/003/0656/0658 /8

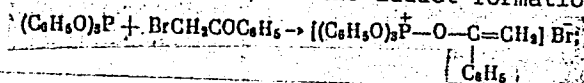
AUTHOR: Imayev, M. G.⁵⁵; Shakirova, A. M.⁵³

TITLE: Interaction between triphenylphosphite and ω -bromoacetophenone

SOURCE: AN SSSR. Doklady, v. 163, no. 3, 1965, 656-658

TOPIC TAGS: triphenylphosphite, ω -bromoacetophenone, adduct

ABSTRACT: Boiling of an equimolar mixture of triphenylphosphite and ω -bromoacetophenone in anhydrous benzene, toluene, or xylene or heating at 120°-130°C without a solvent results in formation of an adduct. The rate of adduct formation is a function of temperature. A maximum of 95% adduct was obtained during a 9 hour heating in toluene of an equimolar mixture of triphenylphosphite and ω -bromoacetophenone at 110°C. Above 120°C, the rate of adduct decomposition is greater than the rate of its formation. The adduct, a crystalline material, decomposes into triphenylphosphate, phenylacetylene, and hydrogen bromide. The adduct reacts very energetically with water, alcohols, acetic acid, and other compounds containing an active hydrogen. Overall, the interaction of triphenylphosphite with ω -bromoacetophenone above 120°C is a two-step process. The first step is the adduct formation according to:

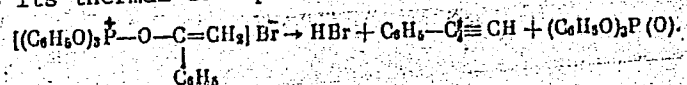


Card 1/2

E 64128-65

ACCESSION NR: AP5019431

and the second step its thermal decomposition according to:



Orig. art. has: 3 formulas.

ASSOCIATION: Bashkirskiy gosudarstvennyy universitet (Bashkir State University);
Vsesoyuznyy nauchnoissledovatel'skiy i proyektnyy institut sinteticheskikh zhiroza-
meniteley (All-Union Scientific-Research and Development Institute for Synthetic
Grease Substitutes)

SUBMITTED: 06Jan65

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 004

OTHER: 004

Card ^{RC} 2/2

L 06506-67 EWP(j)/ENT(m) RM
ACC NR: AP7000486

SOURCE CODE: UR/0079/66/036/006/1142/1143

AUTHOR: Imayev, M. G.; Shakirova, A. M.; Yuferova, M. Kh.

27
B

ORG: Bashkir State University (Bashkirskiy gosudarstvennyy universitet); All-Union Scientific Research Institute of Synthetic Fats (Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh zhirov)

TITLE: Organophosphorus compounds with an active methylene group. II. Synthesis of certain alkylphenylphosphoneacetophenones ¶

SOURCE: Zhurnal obshchey khimii, v. 36, no. 6, 1966, 1142-1143

TOPIC TAGS: organic synthetic process, organic phosphorus compound

ABSTRACT: New Mixed aliphatic-aromatic di-n-propyl- and dibutylphenyl phosphites were synthesized. Their reaction with omega-bromoacetophenone proceeds according to the Arbuzov rearrangement to form n-propyl- and n-butylphenylphosphoneacetophenones. The structures of the reaction products were confirmed by infrared spectra and by hydrolysis to acetophenonephosphinic acid. They react slowly with sodium, liberating hydrogen, and do not color ferricchloride in alcohol solution. Orig. art. has: 1 figure. [JPRS: 37,023]

SUB CODE: 07 / SUBM DATE: 06May65 / ORIG REF: 006 / OTH REF: 001

Card 1/1 h LE

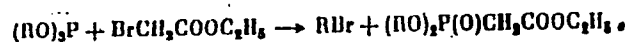
UDC: 547.21'118

ACC NR: AP6025986 SOURCE CODE: UR/0079/66/036/00/1230/1232
AUTHOR: Imayev, M. G. ^(deceased); Shakirova, A. M.; Galeeva, R. A.
ORG: Bashkir State University (Bashkirskiy gosudarstvennyy universitet);
All-Union Scientific Research Institute of Synthetic Lubricants
(Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh zhirov)
TITLE: Organophosphorus compounds with an active methylene group.
III. Synthesis of some esters of carboxyanilides and phosphonoacetic
acid
SOURCE: Zhurnal obshchey khimii, v. 36, no. 7, 1966, 1230-1232
TOPIC TAGS: ^{organic} ~~organophosphorus~~ compound, alkyl phosphoacetate, anilide
alkyl phosphonoacetate, ~~acetate~~
ABSTRACT:
Previously unreported ethyl dialkylphosphonoacetates were obtained by
Arbuzov rearrangement of the corresponding trialkyl phosphites and
ethyl bromoacetates:

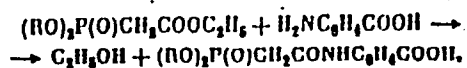
Card 1/3

UDC: 547.26'118

ACC NR: AP6025986



Composition and physical constants of the ethyl dialkylphosphonoacetates are given in the table. Condensation of ethyl dialkylphosphonoacetates with p-aminobenzoic acid at 190—225°C yields the corresponding anilides:

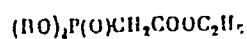


Previously unreported p-carboxyanilides of ethyl di-n-pentylphosphonoacetate and ethyl di-n-hexylphosphonoacetate were also obtained.

Card 2/3

ACC NR: AP6025986

Table 1. Ethyl dialkylphosphonoacetates



R	Yield (in %)	bp (p in mm)	d_4^{20}	n_D^{20}	MR _D		Found % P	Formula	Calculated % P
					Found	Calculated			
N-C ₈ H ₁₇	60.60	157—160° (2)	1.0168	1.4383	79.49	79.37	10.25	C ₁₄ H ₂₉ O ₅ P	10.10
N-C ₈ H ₁₃	64.40	164—167° (2)	0.9973	1.4401	88.82	88.61	9.20	C ₁₆ H ₃₃ O ₅ P	9.23
N-C ₁₀ H ₂₁	36.53	mp 83.5—84°	—	—	—	—	6.24	C ₂₀ H ₄₁ O ₅ P	6.82

Orig. art. has: 1 table.

[W.A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 24Aug65/ ORIG REF: 002/ OTH REF: 001

Card 3/3

SHAKIROVA, E.A., inzh.

Application of the boundary layer theory to the calculation of the secondary breaking of a stream in a case of rapid spreading. Izv. vys. ucheb. zav.; energ. 7 no.12:91-98 D '64.

(MIRA 18:2)

1. Leningradskiy politekhnicheskii institut imeni M.I. Kal'nina.
Predstavlena kafedroy inzhenernoy gidrologii.

SHAKIROVA, G. [Shakirova, H.]

The light of Lugansk. Znan. ta pratsia no.6:2-3 Je '62.

(MIRA 16:7)

(Lugansk Province—Coal mines and mining)

SHAKIROVA, R.

19

PHASE I BOOK EXPLOITATION SOV/5575

Akademiya nauk SSSR. Astronomicheskiy sovet.

Bulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh spurnikov Zemli, no. 6. (Bulletin of the Stations for Optical Observation of Artificial Earth Satellites, No. 6) Moscow, 1959. 23 p. 500 copies printed.

Sponsoring Agency: Astronomicheskiy soviet Akademii nauk SSSR.

Resp. Ed.: Ye. N. Gindin; Secretary: O. A. Severnaya.

PURPOSE : This bulletin is intended for scientists and engineers concerned with optical tracking of artificial satellites.

COVERAGE : The bulletin contains 9 articles which present the results of satellite observations, and describe methods and specific equipment used for photographic observation of earth satellites. An appendix contains a listing of 84 Soviet satellite observation stations with station number. No personalities

Card 1/6

Bulletin of the Stations (Cont.)

SCS/5575

are mentioned. There are no references.

TABLE OF CONTENTS:

Panova, G. V., T. Ye. Syzhchenko, B. A. Firago, and D. Ye. Shkolepov [Glavnyy (Pul'kovskaya) Astronomicheskaya observatoriya AN SSSR - Main (Pulkovo) Astronomic Observatory of the Academy of Sciences of the USSR]. Observations of the Second Artificial Earth Satellite (1957 P) at Station No. 039 (Pulkovo) (Observations: B. A. Firago, D. D. Polozhentsev, G. V. Panova, M. N. Bronnikova. Measurements and Calculations: T. Ye. Syzhchenko, G. V. Panova, D. Ye. Shkolepov, B. A. Firago, and T. F. Kiseleva) 1

Lomazov, G. G. [Main (Pulkovo) Astronomic Observatory of the Academy of Sciences of the USSR]. On Methods for Precise Photographic Determinations of the Positions of Artificial Earth Satellites 6

Card 2/6

Bulletin of the Stations (Cont.)	194/1975	
ation of the MAF-3a/25 Photographic Camera at Pulkovo		13
Pirago, B. A. [Main (Pulkovo) Astronomical Observatory]. System- atical Errors in the Readings of Hundreds of Second of Print- ing Chronographs (21-III Nos. 001, 011, 045 - 1954; 143, 148, 199 - 1957; 235 - 1958)		13
Monero, G. [Santiago Astronomic Observatory of the University of Chile]. On the Illumination of an Artificial Satellite		16
Results of Photographic Observations of Artificial Earth Satel- lites		18
a. Urasin, L. A., L. L. Andriyevskaya, L. K. Kolikova, and Kh. Shakirova [Astronomicheskaya observatoriya im. Engel'- germa, Kazan'-Astronomic Observatory named Engel'garit, Kazan']		13
b. Kalikhovich, F. F., and T. Ya. Ivakina [Nikolayevskoye otdeleniye GAO AN SSSR - Nikolayevsk Department of the Main Astronomical Observatory of the Academy of Sciences		

Card 4/6

TESLENKO, G.I., otv. red.; KHAMRABAYEV, I.Kh., otv. red.;
ENGALYCHEVA, D.Z., red.; SHAKIROVA, M.R., red.

[Study of the geology of the U.S.S.R.] Geologicheskaya
izuchennost' SSSR. Tashkent, Nauka, Vol.35. No.1. 1965.
259 p. (MIRA 18:7)

S/044/63/000/002/020/050
A060/A126

AUTHOR: Shakirova, N.M.

TITLE: Singular case of the solution of computational systems of differential equations

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 44, abstract 2B198
(Tr. Kazakhsk. s.-kh. in-ta, 1961, v. 9, 103 - 107)

TEXT: The author considers the system

$$\frac{dy}{dt} = Y(t, y, x_1, x_2, \dots),$$

$$\frac{dx_s}{dt} = \sum_{k=1}^{\infty} p_{sk} x_k + X_s(t, y, x_1, x_2, \dots) \quad (s = 1, 2, \dots), \quad (1)$$

where the functions $p_{sk}(t)$, $p_s(t) = \sum_{k=1}^{\infty} |p_{sk}(t)| \leq p(t)$ and $p(t)$ are continuous functions of Y and X_s holomorphic in some domain. It is assumed that system (1) possesses a solution of the form $y = 1$, $x_1 = x_2 = \dots = 0$, where 1

Card 1/2

Singular case of the solution of

S/044/63/000/002/020/050
A060/A126

may also be zero. Under the condition of exponential decrease with t of all bounded solutions of the truncated system

$$\frac{dx_s}{dt} = \sum_{k=1}^{\infty} p_{sk} x_k \quad (s = 1, 2, \dots)$$

it is demonstrated that the trivial solution of system (1) and solutions close to it are uniformly stable. The asymptotic properties of solutions close to the trivial one are established. The norm of the solution, its decay, and uniform stability are meant in the sense of the known works by K.P. Persidskiy. Misprints in text.

I.P. Makarov

[Abstracter's note: Complete translation]

Card 2/2

PERSIN, S.A., starshiy nauchnyy sotrudnik; YEFIMOVA, L.F., aspirantka;
YEREMINA, L.K.; TITOVA, R.P.; SHAKIROVA, R.S.

Simultaneous placement of pesticides and fertilizers. Zashch. rast.
ot vred. i bol. 9 no.9:13 '64. (MIRA 17:11)

1. Vsesoyuznyy institut zashchity rasteniy (for Persin). 2. Nachal'nik
Kirovskogo otryada po zashchite rasteniy (for Yeremina). 3. Novosibir-
skaya stantsiya zashchity rasteniy (for Titova). 4. Starshiy agronom
TSelinogradskoy stantsii zashchity rasteniy (for Shakirova).

BRONOVICH, V. Ye.; SHAKIROVA, R.

Preparation of molding powders based on lignin-furfural resins.
Khim. i fiz. khim. prirod. i sint. polim. no. 13253-136 '62
(MIRA 1801)

SHAKIROV, R.; NURIDDINOV, R.N.; YUNUSOV, S.Yu.

Synthesis of "edpetilin." Dokl. AN SSSR 161 no.3:620-621 Mr '65.
(MIRA 18:4)

1. Institut khimii rastitel'nykh veshchestv AN Uzbekskoy SSR.
2. Chlen-korrespondent AN SSSR (for Yunusov).

ACCESSION NR: AP4017608

S/0109/64/009/002/0357/0359

AUTHOR: Zubenko, Yu. V.; Shakirova, S. A.; Sokol'skaya, I. L.;
Belyakov, Yu. I.

TITLE: Using an omegatron for investigating the composition of gases liberated
by some vacuum coatings subjected to an electron bombardment

SOURCE: Radiotekhnika i elektronika, v. 9, no. 2, 1964, 357-359

TOPIC TAGS: mass spectrometer, omegatron mass spectrometer, electron
bombardment, vacuum device residual gas, Pt liberated residual gas, tin oxide
liberated residual gas, Ag liberated residual gas, aquadag liberated residual gas,
willemite liberated residual gas

ABSTRACT: The results of an investigation of residual gases liberated by an
electron bombardment of conductive coatings on glass, such as platinum, tin
oxide, aquadag, silver paste, and willemite on tin-oxide film, are briefly

Card 1/2

ACCESSION NR: AP4017608

reported. Although a qualitative investigation of gases was the objective, some quantitative results were obtained at pressures exceeding 10^{-7} torr. A most simply designed omegatron was built, after J. S. Wagener, et al. (J. Appl. Phys., 1957, 28, 9, 1027), with a 15x15x15-mm resonance chamber. The gases liberated from Pt were: CO, N₂ and CO₂; those liberated from other coatings were: CO, N₂, and to a lesser degree CO₂ and CH₄. The ion currents of principal atomic or molecular ions are tabulated. Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: none

SUBMITTED: 18Jan63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: PH, GE

NO REF SOV: 001

OTHER: 005

Card 2/2

ACC NR: AP6018743

SOURCE CODE: UR/0057/66/036/006/1125/1131

C2
58
E

AUTHOR: Fursey, G.N.; Shakirova, S.A.

ORG: Leningrad State University im. A.A.Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: On the possibilities of confining field emission within small solid angles

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1125-1131

TOPIC TAGS: field emission, tungsten, zirconium, adsorption

ABSTRACT: The authors have investigated field emission from tungsten points having adsorbed mono- or bimolecular layers of zirconium in order to assess the advantages of such tungsten-zirconium points as field emission cathodes for electron optical applications. Zirconium is known to be preferentially adsorbed on the cubic faces of tungsten and to reduce the work function considerably; it was accordingly anticipated that enhanced emission would be obtained from regions of reduced area, with consequent concentration of the field emission current into conical beams of small solid angle. The zirconium was deposited on the tungsten points from a molecular beam, and most of the measurements were performed in a vacuum of 10^{-8} to 10^{-9} mm Hg. The emitting area of a tungsten-zirconium point was found to be much smaller at moderate current than that of a tungsten point, and the limiting current that could be obtained without destroying the point was the same with the adsorbed zirconium as without it. Some 8 to

Card 1/2

UDC: 537.525.2

ACC NR: AP6018743

12 times the current could be obtained within an aperture of 0.01 radian from a tungsten-zirconium field emission cathode as compared with a tungsten cathode without adsorbed zirconium. The angular concentration of the field emission current due to the adsorbed zirconium was even greater at moderate total currents, but at high currents the contrast between the zirconium coated regions and the remainder of the tungsten point decreased. The decrease in the contrast at high currents is ascribed to the inhibiting effect on the field emission of the space charge due to the field emission current. The tungsten-zirconium points were very stable under high vacuum conditions, and when the emission decreased it could be restored by flashing to 1200-1300 °K for 30 sec. Increasing the pressure to 10^{-6} mm Hg considerably reduced the emission but left the contrast between the different parts of the point unchanged, or even increased it; the emission could be partly restored by heating to 1300-1400 °K. Increasing the pressure to 10^{-3} mm Hg destroyed the zirconium film. The authors thank Professor B.N.Ostroumov for calling their attention to the problem, V.N.Shrednik for consultation on the technical aspects involved in preparing adsorbed zirconium layers, and student T.T.Popsuyko of the Physics Department for assistance with the work. Orig. art. has: 5 figures.

SUB CODE: 20/

SUBM DATE: 06Jul65/

ORIG.REF: 011/ OTH REF: 006

Card 2/2 MLP

СОВЕТСКИЙ, Л.Л., инж.; САРДЕНОВА, Е.А., инж.

Efficiency problems of the "Ermenyi Profintern" plant. Met.
i. general. perm. no. 6:76 R-D '02. (MIRA 17:8)

L 43102-65 ENG(j)/ENG(r)/EWT(1)/FS(v)-3/ENG(v)/ENG(a)-2/ENG(c) Pb-4/Pe-5 DD
ACCESSION NR: AR5008612 S/0299/65/000/004/G008/G009

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 4G60

AUTHOR: Shakdrova, S. V.

TITLE: A study of the intensity of potential photosynthesis of some varieties of barley under the conditions of the Eastern and Western Pamirs

CITED SOURCE: Izv. AN TadzhSSR. Otd. biol. n., no. 1(15), 1964, 52-57

TOPIC TAGS: photosynthesis, barley, high altitude farming, Pamir mountain, climatic adaptation, barley maturation

TRANSLATION: The author studied varieties of barley having different origins at the Pamirskaya biologicheskaya stantsiya (Pamir Biological Station) (altitude of 2310 m above sea level): Pallidum 04 (the first and seventh generations), Pallidum 17067 (primary seed from Yakutia), Yevropeum 353/133, and Trifurkatum 18528 (primary seed from China). The intensity of photosynthesis was evaluated by a radiometric method every 2 hours from 9:00 a.m. to 5:00 p.m. with the CO₂ concentration in the room varying from 1 to 0.3%.

Card

1/2

L 43102-65

ACCESSION NR: AR5008612

In the varieties of barley studied, there was a sharp increase in the rate of photosynthesis with height in the shooting stage, but a decrease in the stage of milky ripeness. The curve of the diurnal changes in the intensity of photosynthesis was identical at heights of 2310 and 3660 m, with maxima at 9:00 a.m. and 3:00 p.m. The seasonal curve of photosynthetic intensity also shows two maxima: in the tillering phase and during heading. Pallidum 04 barley of the seventh generation was found to be the best adapted to the bleak climate of the Eastern Pamirs. Ye. Yurina

SUB CODE: LS

ENCL: 00

Life
Card

2/2

SHAKIROVA, V.P.

Results of radiotherapy in cancer of the esophagus.
Trud'y Inst. klin. i eksp. khir. AN Kazakh. SSR 8:99-102
'62. (MIRA 17:7)

1. SHAKIR'YANOV, S. Sh.
2. USSR (600)
4. Plant Breeding
7. 20 years at the Kamalinskaya State Selection Station, Sel.i sem. 10 No. 11, 1952.

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SHAKIR-ZADE, A.S.

On the law of essential conformity of the relations of production
to the character of productive forces. Izv. AN Azerb. SSR no. 7:85-
102 J1'54. (MLRA 8:10)

(Economics)

PETROV, A., general-mayor inzh.voysk; SHAKIRZANOV, R., mayor

Drilling wells for water and the necessary equipment. Voen.-inzh.
zhur. 102 no.5:33-38 My '58. (MIRA 11:6)
(Wells)

SHAKIRZYANOV, A. (Khorezmskaya oblast')

A simple shortwave signal generator. Radio no.9:19 S '62.
(MIRA 15:9)

(Oscillators, Transistor)

SHAKIRZYANOVA, Daima

Million specialists should be trained in one year. Za rul. 20 no.7:6
Jl '62. (MIRA 15:7)

1. Zamestitel' predsedatelya Soveta Ministrov Tatarskoy ASSR.
(Education, Military)

SHAKIRZYANOVA, M.S.

Taxonomy of the moth flies of Kazakhstan. Trudy Inst.zool. AN Kazakh.
SSR 1:102-107 '53. (MLRA 10:1)
(Kazakhstan--Moth flies)

SHAKIRZYANOVA, M.S.

Materials on midges of the Dzungarian Ala-Tau. Paraz. sbor. 17:196-
198 '57. (MIRA 11:3)

1. Institut zoologii AN Kazakhskoy SSR.
(Dzungarian Ala-Tau--Diptera)

USSR/Zooparasitology - Ticks and Insects Vectors of Disease Agents. G

Abs Jour : Ref Zhur Biol., No 1, 1959, 1044

Author : Shakirzyanova, M.S.

Inst : Institute of Zoology; AS Kazakh SSR

Title : Data on Fauna of Blood-Sucking Diptera in Northern Areas of the Caspian

Orig Pub : Tr. In-ta zool. AN KazSSR, 1958, 8, 197-204

Abstract : In northern areas around the Caspian 39 species of blood-sucking diptera were reported, and among that number were 25 species of horseflies, 1 gnat species, 12 of mosquitoes and 1 midge. Phlebotomus flies were not observed. Horseflies, which were of the greatest significance, could be divided into two ecological groups: bottom land and desert-steppe. In the bottom land fauna of horseflies there predominated *Tabanus bovinus*,

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USSR/Zooparasitology - Ticks and Insects Vectors of Disease Agents. G

Abs Jour : Ref Zhur Biol., No 1, 1959, 1044

T. autumnalis, *T. bromius*, and *Chrysosoma hispanica*; in the desert-steppe the most numerous were *T. nigrovittatus*, *T. peculiaris*, *T. erberi*, *T. flavoguttatus*. Among the mosquitoes were 2 strains of the genus *Anopheles* (*A. maculipennis* and *A. hyrcanus*). The gnat (*Eusimulium maculatum*) infested the bottom lands of the Ural river, chiefly in its afforested section. Among the natural enemies of horseflies the wasp of the *Bembes* genus and the sand martin have the most substantial significance.

-- I.L. Rybtsov

Card 2/2

SHAKIRZADEVA, M.S.

Materials on the midges of Kazakhstan. Trudy Inst. zool. AN Kazakh.
SSR 9:167-175 '58. (MIRA 11:7)
(Kazakhstan--Diptera)

SHAKINZYANOVA, M. S.

"On the Sandflies of Kazakhstan."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Institute of Zoology, Academy of Sciences of the Kazakh SSR (Alma-Ata)

ABASOV, Kh.A.; SHAKIRZYANOVA, M.S.

Material on the horseflies of the Dzungarian Ala-Tau. Trudy Inst.
zool.AN Kazakh. SSR 11:173-179 '60. (MIRA 13:11)
(Dzungarian Ala-Tau--Horseflies)

SHAKIRZYANOVA, M.S.

Materials on bloodsucking Diptera of some districts of eastern
Kazakhstan. Trudy Inst. zool. AN Kazakh. SSR 18:235-240 '62.

New species of punkies (Diptera, Heleidae) from Kazakhstan. 254-259
(MIRA 17:3)

SHAKIRZYANOVA, Maksuma Sabirovna; GUTSEVICH, A.V., doktor biol. nauk,
otv. red.; RZHONDKOVSKAYA, L.S., red.; KHUDYAKOV, A.G.,
tekhn. red.

[Biting midges of Kazakhstan (Diptera, Heleidae)] Krovo-
sosushchie mokretsy Kazakhstana (Diptera, Heleidae). Alma-
Ata, Izd-vo AN Kaz.SSR, 1963. 120 p. (MIRA 16:9)
(Kazakhstan--Biting midges)

MAKAROVA, G.A.; SHAKIRZYANOVA, R.M. (Kazan')

All-Russian Congress of Pediatricians. Kaz. med. zhur. 41 no.3:
93-95 My-Je '60. (MIRA 13:9)
(PEDIATRICIANS--CONGRESSES)

SHAKIRZYANOVA, R.M.

Differential diagnosis between chronic tonsillogenic intoxication and latent rheumatic fever in children according to the level of sialic acid in the blood serum. Kaz.med.zhur. no.5:40-41 S-O '62.
(MIRA 16:4)

1. Kafedra propedevtiki detskikh bolezney (zav. - prof. G.A. Makarova) Kazanskogo meditsinskogo instituta i 4-y detskoy bol'nitsy (glavnyy vrach - R.Kh.Savenkova).
(TONSILS--DISEASES) (RHEUMATIC FEVER) (NEURAMINIC ACID)

38517
S/153/62/005/002/004/004
E112/E453

112231
112220

AUTHORS:

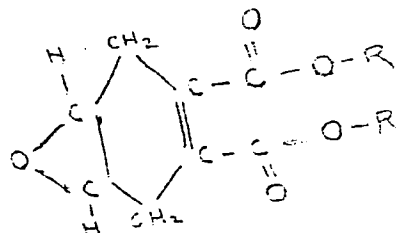
Vozkresenskiy, V.A., Shakirzyanova, S.S.,
Byl'yev, V.A.

TITLE:

Factors affecting the plastification of polyvinyl
chloride with the epoxides of the tetrahydrophthalates

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i
khimicheskaya tekhnologiya, v.5, no.2, 1962, 322-325

TEXT: Polyvinyl chloride was plasticized in the presence of
calcium stearate under conditions of constant weight ratios, and
also in molar proportions, with the esters of epoxy-tetrahydro-
phthalic acid of the general formula.



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E112/E453

Factors affecting the ...

where R = methyl, ethyl, propyl, butyl, isobutyl, isoamyl, octyl, nonyl and decyl. The following physico-chemical constants of the plasticized compositions were determined: 1) relative elongation; 2) hardness (according to Jones); 3) resistance to degradation; 4) physico-chemical constants were correlated with the structural characteristics of R (chain length, molecular size and configuration). Thus, the relative elongation increased from 185.5 to 270% when methyl was replaced by decyl, and when both the plasticizers were used in identical quantities. When both plasticizers were compared in molecular proportion, the increase in relative elongation amounted to 410% from 260%, respectively. It is concluded that the physico-chemical properties of the plasticized compositions is affected equally by the quantities of plasticizer used as by their chemical characteristics and the effects are similar to those described by the authors previously for the unsubstituted phthalates. The following esters of the epoxidized tetrahydrophthalic acid were found of special interest as plasticizers: Plasticizer no.1 - dibenzyl and no.2 - ethylenechlorhydrine. Their characteristics, such as

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38442

S/089/62/012/006/005/019
B102/B104

24.6714
AUTHOR: Shakhidzhanov, S. S.
TITLE: Phase conditions in systems of accumulation of the high
current of accelerated particles
PERIODICAL: Atomnaya energiya, v. 12, no. 6, 1962, 483-487

TEXT: The stability of phase oscillations is studied theoretically, stability conditions are derived, and it is shown that with a sufficiently high current the phase oscillations of a plasma cluster become unstable. The oscillations of a plasma cluster are oscillations of its electric center of mass. The main problem is the determination of the reaction of the plasma cluster to the accelerating resonator in the case of high currents. The phase oscillations in the cluster lead to voltage oscillations at the resonator which, in turn, render the plasma unstable (I. Henry, J. Appl. Phys. 31, 8 (1960)). The author considers a "hard" plasma cluster. The radiative losses and the harmonic by which the cluster is produced and which has the same frequency as the h-f generator, are assumed constant. This is the case if the length l of the cluster

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Phase conditions in systems of ...

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B102/B104

satisfies the condition $l_{\max} \ll \lambda/4$ (λ = wavelength of the h-f generator). The coherent radiation depending on λ can be ignored. The average power released by the cluster is given by $\bar{P} = \frac{1}{2} \text{Re}(\Delta I_1 U + \Delta U I_1)$; $\bar{P} = dW/dt$ minus the radiative losses. U designates the equilibrium amplitude of the voltage at the resonator, $|I_1|$ is the first harmonic produced by the cluster; $|\Delta I_1| = \psi |I_1|$, ψ is the phase. The second term in the equation for $\bar{P}$ is a square function of $|I_1|$. The two terms become comparable as $|I_1|$ increases. $p = |I_1| R / |U| \sin \psi_{eq}$ is the characteristic parameter; R is the shunt resistance of the resonator. If $p \ll 1$, the second term is always negligible (low-current phase condition), but it cannot be ignored if $p \gtrsim 1$ (high-current phase condition). In addition, aperiodic phase oscillations of the type $\psi = \psi_0 \exp(\delta t)$ are considered. Here, the first harmonic is given by $|I_1| \exp(-i\omega_0 t)$, and

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Phase conditions in systems of

$$\bar{p} = \frac{|I_1|}{2} \left[|U| \sin \varphi_{eq} - [I_1, \operatorname{Im} z(\delta, \omega)] \right]_0 \exp(\delta t).$$

If only the first harmonic

is considered, the criterion of stability is given by

$$|I_1| < I_{1, \text{crit}} = \frac{|U| \sin \varphi_{eq}}{F} \frac{1 + \eta^2}{\eta} \quad \text{and } p > p_{\text{crit}} = (1 + \eta^2) / \eta;$$

$\eta = 2(\omega_0 - \omega_{eq})Q/\omega_{eq}$, where Q is the quality factor of the resonant circuit. The condition for $I_{1, \text{crit}}$ is general. The oscillation solution of the form $\gamma_0 \cos \delta t \exp(\delta t)$ for the phase equation $\frac{d^2 \varphi}{dt^2} + \frac{1}{1-\eta} \frac{d\varphi}{dt} \bar{p} = 0$ are studied, and the influence of the multiplicity of high frequencies is discussed. There are 2 figures.

SUBMITTED: October 18, 1961
Card 3/3

L7112

S/069/62/024/005/002/010
B107/B186

AUTHORS: Voskresenskiy, V. A., Shakirzyanova, S. S.

TITLE: Changes in the mechanical strength of plasticized polyvinyl chloride in low-molecular liquids.

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 5, 1962, 533 - 536

TEXT: A material composed of 100 parts by weight of polyvinyl chloride (resin ПД-4 (PF-4)) with 64 parts of dibutyl phthalate and 3 of calcium stearate was investigated. Samples of the plasticized materials were placed in desiccators which contained the following liquids: HNO_3 ($d = 1.43 \text{ g/cm}^3$), $2\text{N H}_2\text{SO}_4$, $2\text{N CH}_3\text{COOH}$, $30\% \text{ H}_2\text{O}_2$, benzene, gasoline, distilled water. The desiccators were kept at room temperature and every 5 days samples were taken from them to determine the following values: tensile strength σ in kp/cm^2 , relative elongation Δl in %, hardness H_B in kp/cm^2 , change in weight %. The results are collected in the illustration. It will be seen from this that change of these values with

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